

## CHAPTER 15

COST ACCOUNTING1501 GENERAL

150101. Cost accounting is required at Defense Working Capital Fund (DWCF) activities; Research, Development, Test and Evaluation (RDT&E) activities performing substantial reimbursable work; hospitals; installation facility engineer activities; Information Technology Facilities (ITF); and for determining the amount of appropriated fund (APF) support provided to Morale, Welfare and Recreation (MWR) activities. Special rules for RDT&E, Defense Working Capital Fund - Depot Maintenance Army (DWCF-DMA), Defense Working Capital Fund - Supply Management Army (DWCF-SMA) and special facility engineering projects are also covered.

150102. Additional guidance is provided in the Department of Defense Financial Management Regulation (DoDFMR), Volume 11B, Chapter 53, Part B.

150103. A cost accounting system requires identification of all funded and unfunded organization costs and their incorporation into all outputs (products and services). Generally accepted accounting principles require consistent and uniform application of both direct and indirect costs to products and services. Accurate cost allocation requires careful identification of costs to the correct periods, organizations, cost pools, and jobs. The underlying discipline is that every dollar of costs incurred by an organization must be related to a product or service produced by that organization.

150105. The following is a listing of responsibilities regarding cost accounting.

A. Develop, Update and Input Cost Distribution Table. The serviced activity is responsible for initially developing and updating the information required in this table. The information will be transmitted to the servicing Operating Location or Finance and Accounting Office (OPLOC/FAO) using established transmittal procedures. The OPLOC/FAO is responsible for ensuring that the information meets the requirements for input to the cost distribution table, inputting the data into the table, scheduling the systems update, and verifying that the information is correctly updated in the cost distribution table.

B. Establish, Update and Input Table of Cost Centers. The serviced activity is responsible for initially establishing and maintaining cost centers for their activity. The initial table and all updates are transmitted to the OPLOC/FAO using established transmittal procedures. The OPLOC/FAO will validate that the information meets the requirements for input to the cost center table, input the data into the table, schedule the systems update, and verify that the information correctly updates the accounting system cost center table.

C. Establish, Update, Input and Close Job Orders. The serviced activity is

responsible for establishing, updating, inputting and closing job order, or like cost finding devices.

D. Develop, Update and Input Table of Labor Rates. The serviced activity will initially develop, and subsequently update, the labor rate table. The initial table and all updates will be transmitted to the OPLOC/FAO using established transmittal procedures. The OPLOC/FAO will validate that the information meets the requirements for input to the labor rate table, input data into the table, schedule the systems update, and verify that the information correctly updates the labor rate table.

E. Develop, Update and Input Table of Overhead Rates. The serviced activity will develop the initial overhead rate table and is responsible for all updates to this table. The initial table and all updates will be transmitted to the OPLOC/FAO using established transmittal procedures. The OPLOC/FAO will validate that the information meets the requirements for input to the overhead rate table, input the data into the table, schedule the systems update, and verify that the information correctly updates the overhead rate table.

F. Develop, Update and Input Table of Available Hours. The serviced activity will develop the initial table of available hours and is responsible for all updates to it. The initial table and all updates will be transmitted to the OPLOC/FAO using established transmittal procedures. The OPLOC/FAO will validate that the information meets the requirements for input to the table of available hours, input the data into the table, schedule the systems update, and verify that the information correctly updates the table of available hours.

G. Monitor, Adjust, Research, Input and Analyze Labor Variance Accounts. The serviced activity and the OPLOC/FAO will jointly monitor, adjust and analyze labor cost variances. Each payroll has the potential to have significant amounts of variable costs. The serviced activity has the most knowledge to determine the causes of significant variances and where the variances should be distributed. The OPLOC/FAO will assure that payroll runs properly, accrues accurately, processes accrual reversals, and initiates correction of charges to the labor default account. Adjustments to the labor variance accounts will be coordinated and agreed to by the OPLOC/FAO and the serviced activity before input by the OPLOC/FAO.

H. Monitor, Adjust, Research, Input and Analyze Material Variance Accounts. The serviced activity has primary responsibility to monitor, adjust, research and analyze material variance accounts. This account is unique to those serviced activities that use the Standard Industrial Fund System (SIFS). Any adjustments to this variance account will be coordinated and agreed to by the OPLOC/FAO and the serviced activity prior to input by the OPLOC/FAO.

I. Reconcile Cost Transactions and Cost Reports. This is also unique to activities using SIFS, and is a joint effort between the serviced activity and the OPLOC/FAO. The OPLOC/FAO will reconcile cost transactions, and the daily and monthly cost reports. The serviced activity will assist in resolving problem transactions.

J. Analyze, Validate, Adjust and Input Depreciation Expense. This requirement is unique to SIFS and Retail Army Stock Fund Financial Inventory Accounting and Reporting Systems (RASFIARS). The serviced activity will analyze and validate depreciation expense.

K. Reconcile and Analyze Gains and Losses. This requirement is unique to SIFS and RASFIARS. The serviced activity and the OPLOC/FAO will reconcile and analyze gains and losses. The OPLOC/FAO will reconcile the M54-Gain and Losses on Fixed Price Orders Report in the SIFS accounting system. The serviced activity will validate the gain or loss on each individual order in SIFS, and analyze the gains and losses in RASFIARS.

L. Develop Leave Accrual Rates and Analyze Any Variances. The serviced activity will develop and analyze leave accrual rates.

M. Resolve and Research Abnormal Balances. Joint responsibility between the serviced activity and the OPLOC/FAO. Abnormal balances include: credit unfilled orders, credit accounts receivable, debit accounts payable, credit undelivered orders, and credit unobligated funds. Who researches and resolves the abnormal balance is dependent upon the specific type of abnormal balance and who maintains the documentation. The serviced activity will research and resolve abnormal balances, which affect the cost ledgers, reports, general ledger and financial statements, with assistance from the OPLOC/FAO.

N. Reconcile Balances Between Cost, General Funds, and General Ledgers. This requirement is unique to SIFS. The OPLOC/FAO will reconcile the general fund module of SIFS to the cost module of SIFS. This includes, but is not limited to, reconciling orders, revenue, cost, work in process, and unfilled orders. The OPLOC/FAO will ensure that all cost ledgers and reports in the cost module are in agreement on a monthly basis, that these balances agree with what is reported through the general fund module, and that both balances are in agreement with the general ledger. All adjustments to the general ledger will be by journal voucher, and input using established OPLOC/FAO procedures.

O. Reconcile Labor, Fringe and Leave Variances. This responsibility is shared by the OPLOC/FAO and serviced activity. These variance accounts must be closely monitored by both the OPLOC/FAO and the serviced activity. The OPLOC/FAO will initiate reviews of the Standard Operation Maintenance Army Research and Development System (SOMARDS) labor master file and, if needed, perform file maintenance to clear variances. Additionally, OPLOC/FAO will input table rate changes, and adjustments to the general ledger based on journal vouchers received from the serviced activity. The serviced activity will clear the variance accounts, and adjust the various rate tables that affect these accounts.

P. Research and Reinput Rejected Cost Transactions. The OPLOC/FAO and serviced activity share this responsibility. Serviced activities using SIFS will research the rejected cost accounting transactions, and the OPLOC/FAO will input the corrections. Serviced activities using SOMARDS will research and reinput their rejected cost transactions.

Q. Monitor Army Working Capital Fund (AWCF) Depot Level Repairables (DLR) and Intransits. Applies to activities that use SIFS and RASFIARS. The OPLOC/FAO will monitor and follow-up on all DLR credits, reports of discrepancy (RODs), and Quality Deficiency Reports (QDRs). The OPLOC/FAO and serviced activity will monitor and control central and local intransits. The OPLOC/FAO will input all adjustments to intransits to the SIFS accounting module, and coordinate a three-way monthly reconciliation between accounting, procurement and supply. The serviced activity will make all adjustments to intransit using Army Materiel Command Installation Supply System (AMCISS) or Standard Army Automated Contracting System (SAACONS).

R. Provide Cost Data to Customers. The OPLOC/FAO and serviced activity share this responsibility. The OPLOC/FAO will provide cost reports and ledgers generated from the standard accounting system, and those unique cost reports programmed to be produced in the job control language while executing the programs. The serviced activities will produce any other cost data reports through data query.

S. Develop Management Reports. Joint responsibility of the OPLOC/FAO and serviced activity with the same requirements set forth in paragraph 150105.R above.

T. Research Negative Unliquidated Transactions (NULO). See Chapter 27.

U. Research Unmatched Disbursements. See Chapter 27.

V. Research Aged Accounts Receivables. The OPLOC/FAO will research and clear aged accounts receivable. The serviced activity will assist in resolving any problem account receivable.

W. Provide Advice and Assistance. The OPLOC/FAO will provide advice and assistance to the serviced activities.

150106. The annual appropriation and funding process is not conducive to accurate cost accounting, so revolving funds have been devised to allow accounting for operations without the normal constraints of annual appropriations. These revolving funds provide separate financing of inventories and work in process, so costs can be accurately identified to time periods, organizations, cost pools, jobs, and other forms of output.

150107. Cost accounting encompasses the full spectrum of financial management, including:

A. Operating budget projections developed from historical data and future cost projections;

B. Current budgets displaying comparison of estimated and actual costs;

C. Cost centers and job orders as primary means of gathering and controlling

costs for customer orders in DWCF and RDT&E activities;

- D. Reprogramming of funds during execution based on actual costs;
- E. Personnel costing that supports space allocation and manpower use;
- F. Weapon systems and force modernization costs at installations that are used in calculating the cost of sustaining the force, and determining weapon acquisition, efficiency and future needs;
- G. Costs supporting reimbursable bills.

#### 1502 OPERATIONAL COST ACCOUNTING

Methods used to capture the project cost in the operations and maintenance appropriation environment have not historically been considered "cost accounting." However, efforts have been made to obtain cost accounting information from installation level accounting systems. This effort is characterized by the creation of additional codes to identify fiscal transactions in greater detail and redefining obligations, so they approximate costs for an accounting period; therefore, an overview of total operations shows cost accumulation as part of the effort to identify and standardize costs. These costs may later provide a basis for making valid budget estimates, determining the cost effectiveness of contract proposals, providing an informed response to a request from higher headquarters, or simply making an accurate cost distribution. These procedures satisfy one of the major objectives of cost accounting--the ability to compare costs at installation, intermediate, and total activity levels to enhance decision making.

#### 1503 COST ACCOUNTING CONCEPTS

##### 150301. Cost Finding (Collection) Versus Cost Accounting.

A. In a cost finding or cost collection system, unit costs are obtained by analyzing expenditure accounts and making test counts of units at regular or irregular intervals. Unlike a cost accounting system, a cost finding system does not provide accounts for accumulating current cost data on a continuous basis.

B. Cost finding may be appropriate in instances where the information is only required for a special purpose. Data produced under this method is usually not as precise as that obtained under a cost accounting system.

##### 150302. Cost Transfers.

A. Cost transfers are used between Army Management Structure Codes (AMSCOs) in the same appropriation (same basic symbol and fiscal year) and allotment.

B. The serviced activity will document and process cost transfers using an

element of resource (EOR) in the 2700 series when there is no need to track costs at more detailed EOR levels for distributing engineer and base operations costs to benefiting activities. The OPLOC/FAO will verify that the net effect of the cost transfer is zero within each 2700 EOR on the Status of Approved Resources Report. Standard operating procedures for interfaces for Integrated Facilities System - Micro (IFS-M) will be jointly developed by the OPLOC/FAO and customers. Budget execution of manpower (EOR 1XXX series) remains with the AMSCO where it was budgeted.

C. The OPLOC/FAO will schedule the appropriate cost distribution applications for SOMARDS.

D. Where economically beneficial, charges for labor, materials and contractual services are accumulated in a specific account of the performing activity. These charges may subsequently be transferred to the benefiting program.

E. At the end of each month make a cost transfer by crediting the performing activity's account and charging the accounts of the benefiting program or activity. The net effect will equal zero. Use one of the accepted methods of distribution.

F. For costs incurred for services performed where the benefiting activity is funded by another appropriation and allotment, set up a reimbursable order and record the reimbursement in the AMSCO to which the performing manpower is allocated.

G. The cost transfer procedure is normally not used in the DWCF because cost accounting systems are available to distribute cost to the proper cost objective.

150303. Accrual Accounting.

A. Operate cost accounting systems on an accrual basis.

B. Cost accounting systems are an integral part of the general accounting system. The general ledger work in process accounts serve as controlling accounts for progress billings issued and progress payments received.

150304. Cost Centers.

A. A cost center is a control unit selected to budget, accumulate and control related costs. It usually consists of an organizational grouping of machines, methods, processes or operations.

B. Cost centers can be at any level of the organizational structure, (e.g., an entire department or an individual shop or office). Each employee of the activity is assigned to only one cost center.

C. Cost centers are either direct or indirect. Direct cost centers directly

contribute to outputs or cost objectives. Direct cost centers may incur indirect costs, but most of their effort is related to outputs. Indirect cost centers indirectly contribute to outputs or cost objectives, and may be located in the mission organization or in general support of one or more mission functions (e.g., planning, mission management, supply, resource management, personnel management, and data processing.)

150305.      Types of Costs (Direct and Indirect).

A.      Costs are either direct or indirect. Direct costs are specifically identified with the product or service performed and economically feasible to charge to the final cost objective. Indirect costs cannot be directly identified and charged to a final cost objective, but will be allocated on some predetermined basis.

B.      Indirect costs are synonymous with overhead. Apply overhead costs consistently from one accounting period to the next. For example, where a heating system is in direct support of a specific job order or project, the cost cannot be charged as direct cost. Instead, it is directly identified as overhead to the job order or the organizational area working on the job order.

1.      Control and measure overhead against budgeted operating costs. Where practical, use flexible budgets, (also called variable budgets), to manage costs. Flexible budgets are prepared for a range of activity instead of for a single level, and thus supply a dynamic basis for comparison because they are automatically geared to changes in volume.

2.      Highlight variances that may require special attention. Types of overhead costs are: operating (direct cost center), other operating (indirect mission cost center), maintenance and service (base operations), and general and administrative expense overhead.

C.      Levels of overhead collection and subsequent application to the final cost objectives are determined by the size and complexity of the organization. For example, an installation having more than one mission will require more levels of overhead than a tenant activity. The four levels below are required for an installation with multiple missions.

1.      Operating overhead, both funded and unfunded, (direct cost center) is incurred and applied at lower organizational levels. It includes expenses for supervisory shop labor, administrative labor, nonproductive time incurred by direct employees, (i.e., down time, plant cleanup time, and indirect materials.) Operating overhead is normally allocated to the final cost objective on the basis of direct labor hours at the cost center level.

2.      Other operating overhead, both funded and unfunded (indirect mission cost centers), is incurred above the organizational level of the direct work centers. Included are functions supporting the overall mission effort and not readily identifiable to a specific functional portion of the mission operation (e.g., planning and control, materiel management, general engineering, mid-level management, and administrative operations.) Allocate these costs through predetermined rates, based upon direct labor hours (funded or

unfunded) or another recognized method of overhead distribution.

3. Maintenance and service (base operations) overhead is incurred outside of the mission activity and allocated by the host to all mission activities in a fair manner. Once these overhead costs are allocated to mission activities, distribute them within each activity on the same basis used to allocate operating overhead. Base operations (BASOPS) are those support services and functions performed by the facility for the benefit of others. BASOPS includes real property maintenance, minor construction, environmental compliance, installation supply and maintenance services, transportation, and other installation common support services. Specific examples of BASOPS are fire prevention and protection, refuse handling, and purchased utilities. Examples of beneficiaries are mission activities, customers, tenant functions performed under commercial activities (CA) contracts, and satellites (regardless of the appropriation or fund account from which such services are financed).

4. General and administrative expense (G&A) overhead include base operation expenses that equally benefit all of the mission activities of the accounting entity and cannot be more specifically identified to a given mission (e.g., security and counterintelligence operations, public affairs, and safety). Distribution is made on the basis of direct labor hours or other recognized methods of overhead distribution.

150306. Methods for Overhead Application. Overhead is distributed by one of the three methods described below.

A. Direct Labor Hours. Method of distribution most commonly used in the Army, and will be discussed throughout this chapter.

B. Direct Labor Cost. Consists of the total cost of labor, including the U.S. Government's share of fringe benefits and other pay.

C. Total Cost Input. Method of overhead distribution preferred by the Cost Accounting Standard Board (CASB). The lowest level of overhead is first allocated to total direct cost, and each level of overhead is then applied to the previous subtotals.

150307. Application of Overhead. Apply overhead based on the actual cost incurred or use predetermined rates.

A. Actual Cost Method. Distribute 100% of actual period cost to all products or services produced within that period. This method raises a problem of equity, because overhead expenses are not incurred uniformly in each period. For example, an activity located on the East coast can expect substantial snowfalls in the month of January, and these snowfalls require significant overhead costs to remove. All other things being equal, the customers for whom work was performed in the month of January will pay for more overhead than customers requesting identical work during July.

B. Predetermined Rate Method. Distribute actual period cost to all products

or services produced within the period using a predetermined rate. This method is preferred, because it uniformly charges overhead to products or services regardless of the month in which work is performed. This method is called "absorption costing".

150308. Element of Resource (EOR). Accounting systems may require recording of EORs at either the two (object class level) or four digit level. If input is required at the four digit level, the data will be summarized at the two digit level. Accounting procedures for EORs is provided in paragraphs 150310 through 150313.

150309. Salaries and Wages. Charge civilian salaries and wages to cost accounts, based on standard labor rates for each cost center or on individual labor rates.

150310. Leave and Fringe Benefits.

A. Fringe benefits include civilian annual, sick, or other leave, and the U.S. Government's contribution to Civil Service Retirement and Disability Fund (CSRDF), Federal Insurance Contribution Act (FICA) taxes, Federal Employees Group Life Insurance (FEGLI), Federal Employees Health Benefits Program (FEHBP), Medical Care (Medicare) taxes, and Federal Employees Retirement System (FERS).

B. Allocate fringe benefit costs to work produced through application of a predetermined rate. This rate should include regular, overtime, and holiday hours worked. Each activity determines its own rates by using historical data.

C. Account for annual leave as follows:

1. Activities receiving employees, at inception of operations or transferred from other organizations, will establish the value of the accrued annual leave liability transferred in. Determine the amount of the initial leave liability assumed based on information derived from leave records, and record this initial annual leave liability with a credit to a liability account and a debit to an equity account. DWCF will not reimburse other appropriations for annual leave liability transferred out of DWCF.

2. Annually, compare the credit balance of allocated cost in the annual leave clearing account to the total debit balance of actual individual leave as supported by the payroll leave records on September 30th of each year. Process an adjustment to bring the debit and credit into balance, that is, to be equal. Show this adjustment in the fourth quarter reports. However, when blanket pay adjustments and/or upgrading or downgrading of employees produces imbalances in the clearing account, adjust the rate so that the imbalance can be allocated over a period not extending beyond the end of the current fiscal year. These approaches will allocate one hundred percent of cost during the fiscal year.

3. When a DWCF facility loses groups of employees to a non-DWCF facility (transfer of missions) or permanently, as the result of a reduction in force, it does not make payment for the funded annual leave liability. Instead, via a cash disbursement, transfer

the amount of the funded annual leave liability to the miscellaneous receipts account of the U.S. Treasury (see DFAS-IN Manual 37-100-FY). If cash or equivalent assets were not initially received when employees were transferred in, the initial entry made to accrue leave costs must be reversed--the liability is debited and the equity account credited.

4. On a monthly basis, charge the value of annual leave actually taken to the accrued annual leave account.

5. Compute the annual estimated cost of annual leave by obtaining a total for annual salaries of all covered employees and applying the amount as shown at Table 15-1.

D. Accounting for Sick, Holiday, and Other Leave.

1. Sick, holiday, and other leave are not continuing cash liabilities, so do not accrue such costs when establishing the books.

2. Compute accruals for sick, holiday, and other leave using a standard rate, based on experience. Credit accruals to the accrued sick, holiday, and other leave accounts, and charge to the proper indirect cost accounts.

3. At the end of each fiscal year, close the balance in the clearing accounts by charging or crediting the proper indirect cost accounts.

E. Accounting for Retirement Programs.

1. Do not consider when establishing the books.

2. Compute accruals by multiplying a standard rate times the hours worked or base labor cost used.

3. Compute the standard rate for accruing retirement, at least annually. At this time, determine the causes of over accruals or under accruals of the retirement clearing account by comparing the amounts accrued with the amounts paid. Adjust the clearing account balance to actual amount due on September 30th. Compute the estimated annual cost of contribution by obtaining a total of annual salaries of all covered employees and applying an amount as shown in Table 15-2.

F. Accounting for FICA Taxes.

1. Do not consider FICA taxes when initial working capital is established.

2. The accrual for the employer's share of FICA taxes is the employer contribution rate times FICA covered base salaries. Use hours worked or base labor cost as a

basis to accrue the contribution for FICA by means of a standard rate.

3. Compute the standard rate for accruing FICA taxes, at least annually. Determine the causes of over accruals or under accruals by comparing the amounts accrued with the amounts paid into the fund. Adjust the account balance to the actual amount due on September 30th. Compute the estimated annual cost of FICA by multiplying the total estimated annual salaries of all covered employees times the applicable rate.

G. Accounting for FEGLI.

1. Do not include FEGLI amounts when establishing initial working capital.

2. The accrual for the employer's share of the cost of FEGLI is 50 percent of the employee's FEGLI deductions as shown on payrolls paid during the period. Use hours worked or base labor cost as a basis to accrue the contribution for FEGLI by means of a standard rate.

3. Compute the standard rate for accruing FEGLI as follows:

a. Compute the FEGLI rate, at least annually.

Determine the causes of over accruals or under accruals by comparing the amount accrued with the amounts paid into the fund. Adjust the account balance to actual amount due on September 30th. Table 15-4 shows a sample for computation of FEGLI Standard Rates.

b. When estimating the total annual salaries of all covered employees, exclude employees making salaries less than \$8,000. Multiply the number of employees excluded by \$10,000 to obtain their regular insurance coverage, and add to total covered salaries.

H. Accounting for FEHBP.

1. Do not consider when establishing initial working capital.

2. Accrue the amount of the employer's cost for the program. Use hours worked or base labor cost as the basis to accrue the contribution for FEHBP by means of a standard rate.

I. Accounting for Medicare Taxes.

1. Do not consider Medicare taxes when establishing initial working capital.

2. Compute the accrual for the employer's share of Medicare taxes using hours worked or base labor cost times a standard rate.

3. Compute the standard rate at least annually. Determine the causes of over accruals and under accruals by comparing the amount accrued with the amounts paid into the fund. Adjust the account balance to actual amount due on September 30. Sample computation is shown in Table 15-6.

150311. Materiel and Supplies.

A. Materiel consists of all tangible items (excluding real property, general purpose equipment, and utilities) necessary to operate, maintain, and support military activities. Include all materiel used in the final cost objective, whether it was paid for by the funding appropriation, or provided free. Account for materiel received free of charge as "unfunded cost."

B. Identify materiel and supplies directly to the final cost objective when economically feasible. If uneconomical, charge the cost to the overhead pool most closely associated with the work. Reduce costs for credits received for materiel returns. Use the actual price paid for the materiel. For materiel received free, use the unit price from the Army Master Data File (AMDF). The requisition and issue or turn-in documents will contain a code (normally be the job order number) to identify the final cost objective or overhead pool.

150312. Contractual Services. Contractual services are those received from private companies or other U.S. Government activities outside the accounting entity. Contractual services include: rental of space, structures, or equipment, research, development, consulting services, or maintenance of plant and equipment. Record costs of all significant services monthly.

150313. Depreciation.

A. Acquisition cost of the asset less salvage value (if it is expected to exceed 10 percent of the acquisition cost), equals the depreciable basis.

B. Divide the depreciable basis by the number of years of the expected useful life of the asset in accordance with the DoD Standard Recovery Periods.

150314. Other Costs. Includes all costs other than labor, materiel, depreciation, or contractual services (e.g. repair and alterations, travel, and transportation.)

150315. Unfunded Costs.

A. Unfunded costs do not result in any disbursement of cash on the part of the performing activity (e.g., depreciation and the unfunded portion of civil service retirement (CSR)). Compute and apply a separate unfunded overhead rate for each level of overhead, using the same method as for the funded overhead rates. The purpose of the unfunded overhead rates is to identify the unfunded costs at the product level to facilitate the comparison of product costs between Army and other Department of Defense (DoD) or private sector activities doing similar

work.

B. Use direct military labor hours to apply overhead, even if the costs are unfunded. DWCF military labor costs are funded. Use composite standard rates when costing military labor, whether the effort was direct or indirect.

C. If the customer provides government furnished materiel (GFM) without charge, identify any GFM to be furnished on the document ordering the work (project order, work request, and so forth). Charge the materiel to the customer as unfunded materiel so that full cost can be obtained.

D. If the operating appropriation receives the capital items free, depreciation expense is unfunded.

#### **1504 RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E)**

150401. Cost accounting is required when an activity receives a significant amount of their budget resources from reimbursable orders or if U.S. Congressional limits are placed on programs.

150402. If the majority of the overhead of an organization is direct funded, a complex overhead distribution system is not required. Normally, base operations and real property maintenance costs are directly funded for operating appropriations such as RDT&E and Operations and Maintenance, Army (OMA). Therefore, distribute only operating overhead costs as funded costs to the final cost objective (reimbursable orders). In this case, an overhead distribution system would not be feasible unless most of the work performed was on a reimbursable basis. Without a cost accounting system, overhead could be statistically derived and applied to customer orders. RDT&E activities should consult AR 70-6 and the DoDFMR Volume 11A to determine what types of overhead costs are direct funded by the RDT&E appropriation and what costs can be charged to customers.

#### **1505 ARMY DWCF ACTIVITIES.**

150501. DWCF is a revolving fund.

A. In order to recover direct, indirect, and general and administrative costs from customers via reimbursable orders, each activity must have a cost accounting system. Under DWCF, collect and identify all direct, indirect, and general and administrative costs incurred to the product or service benefiting from the costs.

B. Based on the cost accounting system, DWCF and non-DWCF customers are billed the total, all inclusive cost for goods and services provided, based on the price structure approved in the President's Budget. Such costs include: the costs of operation and maintenance, military personnel, major construction and repair projects, procurement, and depreciation of associated capital assets.

150502. Distribution of BASOPS costs.

A. Initially, charge or accrue all BASOPS costs (both funded and unfunded) incurred by DWCF facilities to BASOPS accounts, regardless of whether any BASOPS costs are directly identifiable to customer projects, missions, tenants, or satellites. Make distribution according to instructions in DFAS-IN Manual 37-100-FY, and procedures below.

B. DWCF indicator codes 1 and 2 have been developed and assigned to each BASOPS account as published in the definitions, DFAS-IN Manual 37-100-FY. These codes provide a uniform and consistent basis for distributing or charging BASOPS costs to all activities.

1. Indicator code "1" shows that none of the costs incurred and recorded in BASOPS cost accounts are distributed or charged to the installation's mission overhead accounts, customers, or tenants and satellites. These costs are reimbursed directly from applicable OMA or RDT&E appropriation funds through orders issued for that purpose by the next higher command.

2. BASOPS cost accounts coded "1" are (with minor exceptions) primarily troop support activities that contribute to the morale and welfare of soldiers (active or retired soldiers who are stationed at, or live in the area serviced by, the installation). Generally, activities defined in these cost accounts do not benefit the mission programs and customers or the tenants and satellites of the installation.

C. Indicator code "2" shows maintenance and services overhead costs that should be distributed on the basis indicated in DFAS-IN Manual 37-100-FY. The method of distribution is the first performance factor for each account, unless a specific method for common services or population served is used.

1. This code requires that all costs incurred and recorded in these BASOPS cost accounts be distributed to mission activities, customers, tenants, satellites, or CA. Make distribution on an actual or standard rate basis. If standard rates are used, establish a method to analyze the difference between the actual cost and the cost distributed for each BASOPS account. This distribution includes an equitable share distributed to residual type operations, (e.g., clothing sale stores, laundry and dry cleaning services), or direct funded activities, (e.g., non-Army Materiel Command (AMC)-OMA-funded tenants). These residual-type operations, although operated by an organization integral to the BASOPS organizational structure (and identified by DWCF cost distribution indicator code "1"), are similar to a tenant when certain BASOPS support (coded "2") is required in their operation. For example, Laundry and Dry Cleaning Services ("Z" account .E0) all require Utilities ("Z" account .J0) and Maintenance Services ("Z" account .K0) in their operations. Therefore, distribute an applicable share of these "Z" account costs (either as directly identifiable or prorated) to organizations of this type. Also, include "Z" accounts in the total billing to OMA, RDT&E, DWCF appropriations, or the USAMC activity responsible for funding support costs for non-AMC,

OMA-funded tenants. Include in the billing directly to OMA (together with other applicable costs) the total cost incurred at a facility for BASOPS "Z" account .E0 (Laundry and Dry Cleaning Services-DWCF cost distribution indicator code "1").

2. Examine all "Z" accounts identified by code "1" to find those that represent tenant type organizations that use or benefit from those functions or services provided under "Z" accounts with code "2".

D. Indicator code "3" shows general and administrative expense. Distribute these costs by direct labor hour (or other acceptable basis) generated in all mission, tenant, satellite, residually funded BASOPS activities of the DWCF installation. Report these costs as "Indirect Costs-General and Administrative" when required for depot maintenance reporting purposes. Charge the cost applicable to non-DWCF OMA tenants to the reimbursable order provided by the DWCF activities sponsoring command and not to missions, other tenants, and satellites.

E. Review costs incurred and charged to each BASOPS cost account listed in DFAS-IN Manual 37-100-FY at the end of each accounting period and distribute with the following considerations in mind:

1. Charge all BASOPS activity costs coded "2" (or applicable portions thereof) directly identifiable to a specific mission, customer, tenant, satellite, and residual type operations to customers (including tenants and satellites), or to mission overhead costs pools and cost centers. Non-DWCF financed Army tenants and satellites are excluded. Charge their support cost directly to the activity responsible for funding their support and subtract these costs from the total operation cost pools before distribution to missions, customers, tenants, or satellites. Costs charged to missions will ultimately be costed to job orders using predetermined standard rates applied to direct labor hours or other basis for distribution. Add maintenance and service costs that are to be redistributed, and which are directly chargeable to tenants and satellites, to the pro rata share of general and administrative expense (code "3") when billings are processed for BASOPS services.

2. In certain cases, portions of costs of each BASOPS function coded "2" can be identified as directly benefiting (and supporting) a specific "mission" or tenant, (e.g., a firehouse or guard station functioning solely to protect a specific "mission" or tenant or cost of electricity that is directly identifiable to missions or tenants based on meters or engineering estimates and computed by applying cost per kilowatt hour). Charge these costs directly to tenants or overhead cost pools of the benefiting activity. Only the balance left in the BASOPS "Z" account (which represents common functional costs) is subject to allocation to mission, tenant, or satellite activities.

3. Report code "2" (maintenance and services overhead costs requiring redistribution, and all operating overhead applied to job orders) as "Indirect Costs-Production Expense".

4. The specific distribution procedures for each BASOPS account are stated in DFAS-IN Manual 37-100-FY, but alternate methods will be approved with adequate justification. Submit request and justification for waiver to the Director, Defense Finance and Accounting Service-Indianapolis Center, ATTN: DFAS-IN/AQA, 8899 East 56th Street, Indianapolis, IN 46249-2201.

#### **1506 DEPOT MAINTENANCE ACTIVITIES**

150601. Cost Accounting Required. All depot maintenance activities will use these cost accounting rules to ensure standardization of cost comparisons throughout DoD.

150602. Identifying Cost to Job Orders.

A. The job order is basic in depot maintenance cost accounting and the maintenance management system, and the job order number is the main data element to which cost is identified and controlled.

1. Assign direct job orders to control customer orders. All direct job orders will equate to an estimated amount of work and allow for computing a unit price. Describe the amount of work in man years or any other appropriate unit of measure. Use only direct job orders that represent project orders to compute work in process. To assign direct job orders, see subparagraph B below.

2. Use indirect job orders to collect various indirect types of cost, (e.g., supervisory, labor, idle time, and base operation expense.) Other synonyms for indirect job order are overhead cost pool, indirect cost account, and overhead account.

B. Assign direct job orders for:

1. Units subject to "pre-shop analysis" or "examination and evaluation".

a. A separate job order is required for each unit when the estimated cost of maintenance to be performed is in excess of \$150,000. A separate job order is not required for the induction of units with the same identification number (type model series (TMS) or national stock number (NSN)), and an estimated cost of maintenance for each unit is \$150,000 or less as specified below.

b. Assign at least one job order for the induction of all units during a month if they have the same identification number and an estimated cost of maintenance for each unit of \$25,000 to \$150,000. Determine the average cost of each unit.

c. Assign at least one job order for the induction of all units during a quarter if they have the same identification number and an estimated cost of maintenance for each unit of less than \$25,000. Determine the average cost of each unit.

2. Units not subject to "pre-shop analysis" or "examination and evaluation".

a. Assign at least one job order for the induction of all units during a month if they have the same identification number and an estimated cost of maintenance for each unit of \$25,000 or more. Use the average cost of each unit.

b. Assign at least one job order when the units scheduled for induction during a quarter have the same identification number and are expected to exceed \$500,000 in total estimated costs of maintenance. Use the average cost of each unit.

c. When the total estimated cost of maintenance for the units scheduled for induction during the month is expected to exceed \$1 million for the grouping, assign at least one job order a month for the same homogeneous grouping of items by stock classification, subclassification, repair category, or other appropriate criteria. Use the average cost of each homogeneous group.

d. Assign at least one job order each quarter for the induction of all remaining units in the same homogeneous grouping of items by stock classification, subclassification, repair category, or other appropriate criteria. Determine the average cost of each homogeneous group.

3. Lots or groups of items undergoing the same physical process.

a. Establish job orders when it is not economically possible or practical to identify the direct cost with the final cost objective (e.g., a unit undergoing depot maintenance). Services or processes that may use this procedure are plating and painting, which are normally completed by a flow process operation. This procedure may be used when the organization incorporates a flow process operation (i.e., all components or end items go through the same process regardless of the condition of the reparable item).

b. Charge job orders established to obtain the cost for this process to final cost objectives (customer orders) before month end closing. Processed job orders will show zero costs on month end records. Distribute the costs from these job orders on the basis of programmed or estimated amounts, and base the distribution on an actual physical measurement of the output, (e.g., counts or weights).

C. Open and close job orders using the following criteria:

1. Open a job order when a work authorization document (letter of intent, project order, contract) is received. Open job orders within the basic order when the items are delivered to and accepted for induction by the depot maintenance activity. Job orders may be opened 15 days before induction in order to establish a 15 day shop stock of materiel.

2. Close job orders to further direct charges 15 working days after all work on the end item or routed component (whichever is later) has been done and final inspection completed. The activity top resource manager will assure the adequacy of justification and approve any transfers of costs to or from closed job orders.

3. Adjustments to costs of prior years' job orders may be necessary, even though attempts have been made to ensure that all costs have been charged to the correct job order before its closing. If this occurs, adjust shop overhead. Changes of more than one-tenth of one percent must be approved by the Director, Defense Finance and Accounting Service-Indianapolis Center, ATTN: DFAS-IN/AQA, 8899 East 56th Street, Indianapolis, IN 46249-2201 and recorded in general ledger account, "Prior-period adjustment".

150603. Direct and Indirect Labor Classifications.

A. General. Direct labor benefits only the job order for which it is performed. Two classes of direct labor (direct labor-production and direct labor-other) have been established for depot maintenance cost accounting purposes. All other labor is indirect cost.

B. Direct labor-production. Labor directly associated with the maintenance production process, (i.e., production operations that are performed in sequence, have easily recognizable beginning and ending points for a specific production function, and normally have established time standards included on labor routing sheets). Operators of heat treating, plating, and painting equipment are included in the definition of maintenance production processes. Materiel handlers who deliver and pre-position repair parts and supplies for subsequent use are excluded from "direct labor-production," but should be charged as "direct labor-other," if feasible, rather than indirect labor.

C. Direct labor-other. Effort that would not be performed except for the existence of the specific job order requirement, and which does not involve "hands on" production of the maintenance workload. For example, for "pre-shop analysis" or "examination and evaluation" that determine which maintenance operations are necessary, final testing allocated to only one job order, and the engineering effort required to lay out the technical requirements for performance of special maintenance operations on a specific job order are examples of "direct labor-other". Engineering efforts that benefit the maintenance activity as a whole, (manufacturing engineering or equipment maintenance engineering), are not examples of "direct labor-other," but examples of indirect labor.

D. Allocation of Costs. Allocate costs incurred for the same purpose and in like circumstances consistently. Charge only direct employee functions as direct labor. "In like circumstances" governs the distinction between work that benefits job orders directly related to depot maintenance and work for other functions. The work for other functions may be direct to that function, regardless of whether it is direct or indirect regarding depot maintenance. Examples follow.

1. Planning is normally an indirect function and such costs are allocated to maintenance direct job orders as maintenance indirect expense. If a special depot maintenance job order requires a full time planner for a long period of time, then the planner's time cannot be charged as direct cost to the job order--unless all of the planner's time is normally charged as direct cost to the job orders worked on. If the special job order is not for depot maintenance, but for a separate function or another activity where costs are financed with other than maintenance funds, then the planning costs are based on hours worked and any direct material used, and on an appropriate share of the planning department's within shop overhead as well as of the activity's general and administrative, and base operations overhead. In this case, the planner's time equals direct hours worked on the non-depot maintenance job order.

2. Crane operation that benefits more than one cost center is normally an above shop overhead function, so the cost of all crane operators is an indirect cost. If a direct cost center has a dedicated crane used solely for work in that cost center, then (while the crane is in operation) the costs can be charged directly to a job order. In this case, a single crane operator can charge time worked as both direct (when at the dedicated station) and indirect (when operating other cranes).

E. Direct Employees. Direct employees are only those employees assigned to direct cost centers who consistently meet the direct labor criteria. Direct employees must charge their time worked to specific job orders, and must charge time spent on administrative training, union meetings, and awaiting work (because of parts shortages or machine breakdown) to indirect job orders.

F. Indirect Employees. All employees not classified as direct are indirect employees. Indirect employees, such as supervisors and clerks, may be assigned to direct cost centers. Indirect employees, in the performance of their normal duties, can not charge their time to a specific direct job order. An indirect employee assigned to an indirect cost center may be loaned to a direct cost center, perform as a direct employee, and charge his/her time as direct labor. When costs are to be charged to a non-maintenance function or to another activity, the indirect employees are treated as direct.

G. Supervisory Positions. First line supervision (the level immediately over the direct labor workers) is an official supervisory position, and the labor costs are made to the indirect cost of the cost center supervised. Work leaders, team leaders, and other subordinate working job controllers are not first line supervisors. First line supervisors may be borrowed and used as direct labor. When this occurs, the time of the first line supervisor is direct labor and not charged to overhead.

H. Borrowed or Loaned Labor Procedures.

1. Borrowed or loaned labor is when an employee is temporarily transferred from one cost center to another within a depot maintenance activity. The gaining cost center will account for the labor hours, and both the gaining and losing first line supervisor will ensure that loaned employees are not charged twice.

2. When employees are temporarily assigned to the depot maintenance activity without payment or reimbursement to the activity to which the employee is permanently assigned, the costs are treated as other direct costs unfunded. Hours worked under such an arrangement are not direct labor hours. Employees temporarily assigned from the depot maintenance activity to other activities are not costed as maintenance expense.

150604. Direct Materiel.

A. The cost of direct materiel is charged to direct job orders when the materiel is issued to an item receiving depot maintenance. It is not charged to direct job orders (work authorization) at the time materials are ordered from the source of supply or when delivered or set aside for future use. Materiel will remain in inventory until charged to job orders.

B. Determine cost reparable exchanges as follows:

1. Army procurement appropriations exchangeable items, (e.g., components, assemblies, or subassemblies), are requisitioned from supply sources to replace unserviceable economically reparable items removed from the end item and returned to the Army supply system during depot maintenance. Account for these items as unfunded direct materiel costs. The net materiel cost of an exchanged item charged to the job order will be the average cost to repair the item removed, regardless of whether a new or repaired item is actually installed, or if the item removed is later repaired for the supply system. Determine the unit "average cost to repair," computed as "total cost" (funded and unfunded) each year for each exchangeable item. Send requests for unit repair costs of exchangeable items not listed in the bulletin to the responsible major subordinate command. Annually, determine a worldwide average of contract, interservice, and in house unit costs. Base these costs on the most recent fiscal years' cost experience, or engineered estimates when there is no previous cost experience. Record and report the net materiel cost of exchanged items separately. If an exchangeable item is not economically reparable, base the cost of replacement on the current standard supply catalog unit price, and report as unfunded costs.

2. This costing policy applies to depot maintenance performed in organic and contractor facilities, and by other military services under Interservice Support Agreements (ISSA) when the Army provides Government furnished items on an exchange basis. It does not apply to work done by the Army for Army National Guard and Reserves, and other military services. Bill the materiel exchanged or missing to the customer and account as funded costs, and exclude the cost of exchanged or missing stock fund parts that are determined by established stock fund procedures and accounted for as funded costs.

3. Exchange economically reparable items or components through the supply system when:

a. Directed by the customer or commodity command because

of excess stock.

b. The depot maintenance activity does not have the capability and mission to repair or rebuild the component.

c. It is a proprietary item.

d. Repair or rebuild would cause excessive delay in producing the higher assembly or end item. Excessive delay is component processing time which is equal to or greater than the normal repair cycle of the higher assembly or end item.

e. Repair or rebuild would require set up, processing, production line set up, engineering, or training and would not be of economical production quantity.

C. Charge the standard catalog price (acquisition cost if not a catalog item) to the job order for all missing exchange items, since they cannot be exchanged. Report the cost of the missing exchange item to the customer as a separate cost element.

D. Exchange, rather than repair, all items that are in long supply. Cost Army procurement appropriation items according to paragraph 150604.B.2 above. Sell stock fund items to depot maintenance activities at a reduced price based on "average cost to repair". The customer or commodity command will inform the depot maintenance activity of the long supply items to be used instead of repair when each work authorization is issued.

150605. Indirect Materiel. Charge cost to "within shop overhead," when issued to the direct work center that will use the materiel. The dollar value of on-hand indirect materiel should not exceed the average monthly indirect materiel charged to the cost center for the preceding year. This materiel is considered shop stock, bench stock, floor stock, or bin stock. Do not confuse this type of stock with stock issue points that serve several cost centers or an entire maintenance building. Stock issue points must maintain full inventory accountability under general ledger control and normal supply manager rules.

150606. Customer Furnished Materiel.

A. Customer furnished materiel includes materiel furnished by customers in the depot maintenance work as specified in the Depot Maintenance Interservice Support Agreement (DMISA). The customer determines cost and direct accountability, and these costs are based on current standard catalog price or acquisition price for non-catalogued items. Determine cost for reparable exchanges and missing components (as explained in paragraph 150604.)

B. Cost customer furnished materiel as an unfunded direct materiel cost. The customer will direct the disposal of leftover materiel when the job order is completed. Debit operating materials and supplies and credit equity for transfers-in from others without

reimbursement for materiel abandoned by the customer.

150607. Materiel Returns. Credit "used materiel" returned to the depot maintenance inventory to the job order on which charged. If the job order has been closed, credit it to indirect maintenance expense. Hold the materiel in the inventory account until it is issued on another job or is excess to the needs of the depot maintenance activity. If the item is excess, return it to the supply system. If credit is not granted:

A. For materiel not identified with a specific job order, charge to maintenance, indirect maintenance expense, for the cost center from which it was turned in and originally charged.

B. For materiel identified with a specific job order, charge it to that job order until the cause for non use is determined. If the customer changed specifications, charge the cost to a separate job order for reimbursement, not to the job order that covers the maintenance work. If the activity overbought, charge to maintenance above shop overhead.

150608. Headquarters General and Administrative Expense.

A. General. Allocate cost based on the beneficial or causal relationship between supporting and receiving activities. Allocate expenses directly to the activities as much as possible. Group total command expenses in logical and uniform expense pools and allocate as stated in the next subparagraph. These allocations will reduce the amount of residual expense (those of managing the command as a whole). Allocate these residual expenses as stated in 150608.C. No activity will have an indirect cost allocated to it, either through a uniform or residual expense pool if other costs for the same purpose have been allocated directly to it or any other activity.

B. Groups of Command Expenses.

1. Allocate centralized service expenses of a command to its activities based on the service furnished or received. Centralized services consist of specific functions which, if it were not for the command, would be performed or acquired by some or all of the activities individually, (e.g., centralized personnel administration and data processing functions, including central design activities).

2. Distribute the expenses of a command for staff management or policy guidance, which are major and a part of total command expenses, to the activities that receive the most benefit. Staff management or policy guidance is provided to activities, based on the overall direction or support operations such as reclamation, accounting, and engineering.

3. Distribute line management expenses only to the particular activity being managed or supervised. Line management consists of managing or supervising an activity or group of activities. If more than one activity is managed or supervised, distribute the expense based on the total operation.

4. Distribute expenses or accruals made by a command for its activities directly to activities to the extent that all such payments or accruals of a given type or class can be identified with specific activities. Central payments or accruals are those which, except for some activities, would normally be accrued or paid for by the individual activities. (Common examples are payrolls and retirement costs.) Allocate such payments or accruals, which cannot be identified specifically with individual activities, to the benefiting activities. Use an allocation base that represents the factors on which the total payment is based.

5. Distribute, as residual expenses, the expenses of a command not identifiable with specific operations or activities (subparagraph 150608.C).

C. Distribution of Residual Expenses.

1. All command expenses not distributed above are residual expenses. Typical residual expenses are those of the commander, the Director for Resource Management (DRM), the judge advocate, and any staff not identifiable with specific operations of activities. Allocate residual expenses to each activity under a command using the ratio of activity payroll hours to total payroll hours (military and civilian) of all activities under the command or higher headquarters.

2. When an activity consistently receives much more or less benefits from residual expenses than shown by the allocation, charge directly to the activity and exclude its payroll hours from the base.

3. Account for allocations of command expense as unfunded general and administrative expenses at the maintenance activity.

150609. Special Requirements.

A. The depot maintenance quality assurance (QA) organization is a distinct indirect entity, which may charge labor as direct or indirect based on the following:

1. Charge QA functions not economically identifiable with a specific job order to an above shop maintenance overhead job order.

2. Charge QA functions in random quality sampling, technical and engineering evaluations, and analysis reporting on defective repair to an above shop maintenance overhead job order.

3. Classify and report labor costs for inspections and tests to determine work requirements. Classify and report pre-shop analysis, initial evaluation and inspection, and pre-inspection or shake down inspection as direct labor-other.

4. Classify and report as direct labor-other, final inspections and tests

occurring after maintenance is complete.

5. Classify and report operational inspections and tests during maintenance, to determine condition and make adjustments, as direct labor-production.

6. Do not charge supervisors, clerks, and other QA administrative support personnel to specific direct job orders, unless loaned and used as direct labor.

B. "Backrobbing" is only allowed to prevent serious work stoppages. Charge labor as follows:

1. The removal and reinstallation from the losing end item of a "backrobbed" part or component is charged to above shop overhead when it is costly.

2. The catalog price, acquisition cost, or average cost to repair the item that was "robbed" is charged to the benefiting job order with an equal credit to the losing job.

3. The labor cost to install the "robbed" part, component assembly or subassembly is charged to the benefiting job order as normal direct labor production.

C. The item manager at the National Inventory Control Point (NICP) will direct when items are to be cannibalized. Return items obtained through cannibalization to the supply system. The item manager will issue a funded reimbursable order. Submit the order with a "save list" of items returnable in the supply system.

D. Calibration costs.

1. Account for all costs (funded and unfunded) of calibrating test and measurement equipment used by depot maintenance activities as maintenance overhead expense to the applicable cost center.

2. For those installations with a technical calibration labor force included in their approved manpower authorization (for example, mobile calibration team), the cost of calibrating that specific installation's depot maintenance operating equipment is charged to maintenance overhead expense.

3. Cost of calibration services performed by the above calibration labor force for any other activity is on a reimbursable basis.

E. In general, issue a separate customer order to the performing activity for modification work. When modification is with maintenance, the following applies:

1. Charge direct modification as modification.

2. Charge labor cost for services (e.g., disassembly, test, repair, inspection, rebuild, replacement, and servicing) that are a normal part of overhaul to the overhaul functions. Charge direct labor as modification only when it is peculiar to that task.

3. Charge modification labor costs to the job order for overhaul or other maintenance functions, when the amount of modification labor is considered insignificant and will not distort the job order standards.

F. Charge program automatic test equipment and numerically controlled machines to the nearest indirect cost pool to which assigned. For example, if numerically controlled milling machine "A" is assigned to and operated with machine shop "B," then the programming cost should be charged to the within shop cost pool for machine shop "B". Charge programmer's time to the shop getting the service.

G. Charge machine tool setup time to the benefiting job order. Setup time is normally part of direct labor and not controlled separately, but when a lot of time is spent on a setup that benefits more than one job order, then it is allocated to all benefiting job orders. Delay of workers waiting for a setup to be completed is indirect expense of the workers' cost center.

H. Accounting for defective work and spoilage.

1. Defective work and spoilage applies to the cost of:

a. Additional materiel and labor needed to remedy or correct imperfections arising from normal production and bring to standard specifications.

b. Items so impaired or spoiled, beyond that which is normal, that they must be taken out of process.

c. Redoing "guaranteed" work.

d. Reinspection of components and assemblies.

2. Defective work and spoilage is a normal direct charge when a certain amount of spoilage or defects are inherent and beyond the operator's control. Some examples are: acceptable reject rates of castings, welds, and brazings; minor realignment or refitting of units that are improperly finished or aligned by shop or manufacturer; and resolder of connections.

3. Charge defective work and spoilage to the benefiting job order as direct cost when the amount of the direct labor hours is determined to be insignificant.

4. Account for the cost to correct major defective work and spoilage as indirect operations overhead expense as follows:

a. Use within shop overhead job order when the specific responsible cost center can be clearly identified.

b. Use above shop overhead job order when one responsible cost center cannot be clearly determined or when the amount is less than the cost of the investigation.

J. Credit net proceeds from the sale of scrap to the generating activity, and:

1. Credit specific job orders for estimated net proceeds from the sale of "ripout materiel" removed during work on vessels, aircraft and weapons.

2. Credit proceeds from other scrap to a general and administrative expense account. Debit or credit this account for the difference between estimated proceeds from the sale of "ripout materiel" and actual proceeds when the difference is insignificant or the job has been closed.

3. The Defense Logistics Agency's (DLA) Defense Reutilization Management Service (DRMS) has approximately 206 Defense Reutilization and Marketing Offices (DRMOs) located worldwide at various military installations. These DRMOs account for the proceeds from sale of scrap generated from condemned carcasses and from sale of other disposable property, so do not enter these proceeds into the accounts of the DWCF-DMA.

K. Training.

1. Charge the cost of training, performed for the depot maintenance activity's benefit, to above shop maintenance expense. These costs include all elements of cost: pay of trainees, travel, transportation, per diem costs, pay of teacher, tuition and materials. Training includes planning the course, instruction, attendees' costs, and related support.

2. Charge the training of employees requested by activities outside of the maintenance activity to customer order as technical assistance.

3. Charge the hours of on the job training in actual production as direct labor to the related job order. Observation and non-contribution are charged to above shop maintenance expense.

4. Conduct maintenance support training, at depot maintenance activities or elsewhere, using depot maintenance personnel. Separately charge depot maintenance personnel hours worked, materiel consumed, and related indirect costs to direct expense on a customer order for new equipment training.

L. Charge all technical assistance cost (e.g., direct labor, direct materiel, and all overhead applicable to the employee's assigned work center) to customer orders identified with a work productivity code (WPC) "MO". Depot Maintenance Technical Assistance (DMTA)

is a specialized service provided by qualified depot technicians, which can be accomplished in several ways depending upon the requirement. Assistance may include instruction, non-maintenance repair or support processes for military equipment, special Army National Guard or Reserve units, training foreign nationals using qualified depot maintenance personnel to provide technical information, and instructions or guidance. This assistance may be specialized work for operational activities, other maintenance organizations or foreign governments that require special skills, tools, etc.

M. Cost of manufacturing is not a maintenance expense, so do not charge the element of cost used in manufacturing (direct labor and raw materiel) directly to a maintenance program. Identify separate manufacturing and maintenance cost using the following accounting procedures.

1. Cost items manufactured for wholesale inventory stock to funded customer orders issued by the item manager.
2. Manufacturing is permitted when the needed item is not in the supply system or cannot be procured commercially. This includes an item on back order (due in) that will not be received in time to complete a critical maintenance job.
3. Maintenance job orders should be charged for the manufacturing cost of items they use or request.
4. Transfer all manufactured items to inventory, so that the item will be available for issue to the job order that previously forecast the requirement. The maintenance job order will account for these as materiel costs.
5. Record the manufactured items as inventory at the contracted unit price (standard or estimated), and not at the actual cost to produce. Account for the difference between the contract price and actual cost as a gain or loss.
6. Assign all line items manufactured for depot inventory to an individual or bulk manufacturing job order. The line item value is based on a dollar amount approved by the depot maintenance activity's higher headquarters.

N. Charge monetary awards paid to employees, (e.g., suggestion awards, sustained superior performance, and special act awards) as a general and administrative expense. Quality step increases are accounted for as normal labor expense.

O. Justify and document a cost transfer by the maintenance manager when it is approved by the depot resource manager, when materiel and other direct costs exceed \$500, or when 30 or more direct labor hours are transferred. When a customer changes a customer order number, requiring the assignment of a new job order, the chief cost accountant may approve the cost transfer. A cost transfer is the transferring of recorded cost from one job order to another.

P. Costs, associated with necessary cancellation or reduction actions, are not chargeable to completed units or to indirect expense, but charged to the customer. Examples are planning costs, non-creditable direct materiel, special test equipment, necessary preservation packing shipment effort, and any additional administrative effort caused by the cancellation or reduction.

Q. Charge overtime premium and shift differential cost to the applicable cost center within shop overhead. For a worker who earns \$8 per hour base pay (straight time) and overtime of \$12 per hour, charge only the difference between base hourly rate and overtime rate of \$4. Charge overtime to the customer order only when the job worked is clearly responsible for the cost. Clear responsibility is established when the depot maintenance activity agrees to use overtime to meet an upgraded customer requirement.

R. Charge idle plant capacity costing, as follows.

1. Document idle or partially idle depot maintenance facilities (including equipment) proposed for retention to meet mobilization requirements per AR 700-90, and submit to: Director, Defense Finance and Accounting Service-Indianapolis Center, ATTN: DFAS-IN/AQA, 8899 East 56th Street, Indianapolis, IN 46249-2201 for approval. If approved, identify and fund the costs (direct and indirect) per DFAS-IN Manual 37-100-FY. Do not include on a pro rata basis in customer's job order costs.

2. If facilities are not approved for retention to meet mobilization requirements, but retained for future depot maintenance, charge to the appropriate overhead account and apply to the job order.

#### 1507 DEPOT MAINTENANCE AT NON-DEPOT MAINTENANCE ACTIVITIES

150701. General. When depot maintenance work is performed at a non-depot maintenance activity, detailed cost accounting is not required.

150702. Reporting Requirements. Account for and report workload assigned to activities other than depot maintenance, as follows:

A. The responsible major subordinate command will authorize the work, and the reimbursable amount will be negotiated with the activity.

B. The performing activity bills the appropriate activity under the negotiated agreement.

C. The central agency reports the amount paid as Central/Interservice/non-depot maintenance activity cost (field 36), on the RCS DD-M(A) 1397 report. The report contains the item worked on, work group, and work breakdown structure.

#### 1508 ACCOUNTING FOR SPECIAL FACILITIES ENGINEERING PROJECTS

150801. Minor construction, alteration, maintenance, and repair projects subject to statutory or administrative limitations require project accounting. This includes:

A. Minor construction projects subject to AR 415-25 (Facilities for Research, Development, Test and Evaluation) and AR 415-35 (Minor Construction).

B. Maintenance and repair projects subject to the approval authority limitations in AR 420-10 (Management of Installation Directorates of Engineering and Housing), current statutes, directives, or other Army issued policies.

C. Projects performed by the installation under the Family Housing Operation and Maintenance program or the Family Housing Construction program subject to limitations and approval authority in AR 210-50 (Family Housing Management), and other Army policy directives: maintenance and repair projects; alterations and addition-expansion-extension projects; and other minor construction projects.

150802. The installation commander is responsible for financial control over projects subject to statutory and administrative limitation.

A. The installation DRM will:

1. Determine the detail level (below the level prescribed in DFAS-IN Manual 37-100-FY) at which the accounting activity will maintain separate accounts relating to special facilities engineering projects. (Refer to Table 15-7 for rules on setting up project accounts.) The project level is dependent on specific DA requirements; the sophistication of accounting systems; the need of the installation facilities engineer, the accounting activity's capability of meeting the facilities engineer's requirements, and the facilities engineer's capability to maintain project cost accounting records.

2. Develop accounting systems, procedures, and reporting requirements. Refer to Table 15-8 to account for cost elements.

3. Compare the control records maintained by the OPLOC/FAO and those maintained by the facilities engineer and the family housing manager, if any.

4. Conduct internal reviews of operations to determine:

a. Compliance with accounting policies and procedures.

b. The adequacy and effectiveness of the financial controls.

c. Compliance with approval authorizations and project cost limits.

**150803.      Responsibilities of the OPLOC/FAO.**

- A.      Assist fund holder, if needed, in determining availability of funds for incurring commitments or obligations for goods and services to be used on special facilities engineering projects. (Refer to paragraph 150804 below for installations operating under a decentralized fund control system.)
- B.      Perform accounting for projects below the DFAS-IN Manual 37-100-FY level under applicable guidance and directives.
- C.      Post cost incurred for minor construction projects to the "Construction in Progress" general ledger account. Once the project is complete, transfer the costs to the fixed asset or expense account.
- D.      Report costs incurred on each project in a timely manner to the facilities engineer. The DRM, accounting activity and facilities engineer will jointly set reporting timeframes.

**150804.      Facilities Engineer Responsibilities.**

- A.      Determine availability of funds for incurring commitments or obligations for goods and services to be used on special facilities engineering projects for installation operations under a decentralized fund control system.
- B.      Advise the OPLOC/FAO, in writing and on a timely basis, of newly approved projects and the account code designations assigned to them. This notice is the basis for setting up project accounts.
- C.      Control costs, so that project limits are not exceeded.
- D.      Maintain all financial records that support the project.

150805.      The installation Director of Public Works (DPW), in coordination with the facilities engineer, will ensure that the estimated cost of orders placed with the facilities engineer does not exceed limitations imposed on family housing work orders.

**1509      COST FINDING.**

150901.      General. Cost finding is a means to determine costs when a job order or a process cost accounting system is not part of an Army component's formal accounting system.

**150902.      Standards.**

- A.      Maintain all supporting documentation.

- B. Before applying cost finding techniques, determine:
  - 1. The cost goals, both intermediate and final.
  - 2. The organizations involved in achieving the cost goals, and the tasks performed by each organization.
  - 3. The cost elements.
  - 4. A plan, which includes the specific cost finding techniques to be used and the criteria to be followed.
  - 5. Description of how the techniques will accomplish the cost goals.
- C. Maintain the above determinations and all working papers used to accumulate cost elements that support billings to the public.

150903. Identify Cost Objectives.

- A. Cost goals are functions or work units for which management wants costs identified, measured or accumulated. Cost goals should be in sufficient detail to clearly describe the specific function or product being costed.
- B. Pay careful attention to the identification of cost goals. A cost goal identified at a macro level (i.e., organizational level) requires less effort to determine the relevant costs and associated quantitative costs. Accumulation of costs at the micro level (a specific function or operation) is more time consuming. At the macro level, the accounting system (through the use of coding structures and the general ledger accounts) may provide most or all of the required financial data to establish relevant cost information. At the micro level, it may be necessary to use one of the methods under paragraph 150908 to identify and accumulate the required costs.
- C. Classify organizations as either direct (actually involved in performing the cost goal) or indirect (performing as a support organization), depending upon identification of cost goals. At the macro (or upper) level, classify all staff organizations as indirect, and classify, generally, all line organizations as direct. At the micro (or lowest) level, it is possible that a staff organization or one of its elements may be classified as a direct organization. The distinction between the macro and micro levels is an important consideration in complying with Office of Management and Budget (OMB) productivity requirements. Establishing a cost goal is a management decision essential to selecting the appropriate cost finding technique.
- D. For cost finding purposes, proper identification and description of cost goals are important. Within DoD, cost finding techniques are used to compare costs of different organizational units or operations performing the same particular operation to identify more efficient methods of performing the same task. Cost goals can also be used to compare

organizational efficiency, determine appropriate billing of non-DoD customers, and for productivity measurement purposes.

150904. Identify Organizations that Contribute Resources to Cost Goal. Usually, the units are within the activity itself.

A. Initially, classify the installation level organizational units as direct or indirect. A unit responsible for actually performing the work is a direct unit, while one that provides support or performs an administrative function is an indirect unit. Do not classify organizational units as both direct and indirect for the same cost objective.

1. An organization's classification as direct or indirect may change as different cost goals are identified and analyzed. Trying to retain the same classification for different cost goals can result in erroneous cost determinations, and lead management to make poor or faulty decisions.

2. An indirect organization is not always recognized in the computation of costs for a final cost objective. At the macro level, staff organizations are generally classified as indirect, and the related costs are allocated among the supported direct organizations. At the micro level, materiality and usefulness are the determining factors.

B. The organizational units can be classified through use of an interactive process or the use of organizational charts or tables, depending on the final cost goal. The interactive process consists of establishing the relationship that each organizational unit has with the product or service for which the cost finding technique is being developed. First, identify the organizational units directly involved in the process. Second, identify the organizational units providing indirect functions to the direct organizational units. Third, repeat this procedure until all organizational units are classified as direct or indirect for all identified cost goals.

C. To determine which organizations are involved, identify the flow of actions related to the cost goal and the related intermediate cost goals.

D. Organizational activities involved in a particular cost goal or interim cost goal can cross organizational lines of responsibility.

150905. Identify Cost Elements.

A. An important aspect of any cost finding technique is identifying the direct and indirect cost elements that apply to the product or service. Both direct and indirect activities can have the same cost elements. The difference is the allocation of all applicable indirect costs.

B. Identify all possible cost elements, then determine which cost elements are significant. You can use the operating program general ledger expense accounts to accomplish this. Once all potential applications are identified, decide which cost elements warrant separate considerations.

C. After developing the statistical cost data, the individual or group responsible (for applying cost finding to the cost goal) can determine the significance of each cost element in the final determination. At this point, remember that the information is only raw data. Decisions must be made on the relevance and materiality of each cost element to the cost goal. Materiality concerns whether excluding the data could distort the computed value for the final cost goal.

150906. Application of Prescribed Rates.

A. The purpose of using cost finding techniques is to use all cost elements in computing the final cost. When the purpose is preparation of a report for an agency or to establish the cost associated with the Security Assistance Program, follow the guidance in DoDFMR, Volume 15 to ensure that all costs are considered.

B. Apply the following rules to determine the individual costs of intermediate and final cost goals:

1. Obtain civilian personnel labor costs from pay scales issued by the Office of Personnel and Management (OPM). Compute labor costs using "step 5" of the applicable pay grade for general schedule (GS) series and Wage Board personnel. Use only productive time (time actually used to perform the function) for amounts included as direct labor costs. All other time is indirect labor time and included in overhead. When known, use actual costs and maintain the documentation that supports the actual costs.

2. Compute civilian personnel benefits costs using the rates contained in the DoDFMR, Volume 11A.

3. Cost military personnel costs using the rates for each military grade published each fiscal year by the Office of the Secretary of Defense (OSD). They are available on the internet at [www.dtic.mil/comptroller/rates/](http://www.dtic.mil/comptroller/rates/).

4. Analyze the productivity of both military and civilian labor. Record productive labor (actually chargeable to jobs) as direct labor, and indirect labor (cannot be charged to a specific job) as overhead.

5. Determine direct materiel costs using standard prices, unless the actual cost of the materiel is known.

6. Determine other costs directly related to the cost goal by using documents such as vendor invoices, travel vouchers, etc.

7. Base indirect costs on a mathematical proration of overhead to the cost goal, based on factors such as the ratio of direct labor costs for the cost goal to total labor costs for the installation.

8. Calculate depreciation expense for depreciable real and personal property using useful life when the acquisition cost, book value, or estimated fair market value equals, or exceeds, the investment threshold used by the Congress for appropriating DoD procurement appropriations. Useful life refers to the economic usefulness of an asset and is based on actual or planned retirement or replacement practices, not "standard" tables of asset lives. The useful life shall not exceed 40 years.

150907. Identification of Source Documents.

A. Before determining the values for each type of expense, identify the source documents for the required data and obtain copies. Determine the number of documents involved, especially if the cost goal is to determine average unit costs for a certain action.

B. When the final cost goal is the cost determination of performing a single event, identify the specific documents involved. There may be times when the cost goal is broader. For example, determining the average cost of issuing checks without regard to whom they are issued. In such a case, identifying the specific documents involved is not as significant as finding the operating costs (including the materiel and supplies used) of the organizational units directly involved in the process.

150908. Selection of Cost Finding Technique. Choose the best cost finding method based upon the purpose(s) for which the cost goal is established. A statutory or a recurring requirement necessitates a more precise method than does cost goals established to meet internal management need. Below are some cost finding techniques.

A Observation. Use observation when the specific effort to be costed, or a similar effort, is in process.

1. First, determine the requirements (see paragraph 150902).
2. Second, physically observe the steps that the product or service goes through, documenting the following:
  - a. Various events incident to performance, (e.g., receiving and date stamping invoice, review of system documentation prior to approval, signature by supervisor, etc.)
  - b. The number and grade levels of personnel directly working on the effort.
  - c. The length of time spent on each activity.
  - d. Direct materiel used.

- e. Indirect materiel used.
- f. Types of support received from other organizational units (e.g., system support, facilities, document duplication.)
- g. All other factors that have an impact on the cost of producing the product or performing the service. A traditional flow chart of the entire process is helpful for organizing, visualizing, and understanding the particular process under review.

3. List all identified cost elements and compute the cost of each element using the general ledger expense accounts. The budget office can help you with facility (lighting, square footage, etc.) costs, and validating organizational costs.

4. Document any assumptions, so users of the resulting information will have a clear understanding of the process used.

B. Statistical Sampling. Use this technique when there is a large volume of similar work being performed on a continuous task basis, (e.g., packing, crating, and handling costs incurred at the depot level.)

1. Select a random sample of items when initially placed into the performance cycle. Record the organization, pay grade, length of time involved, and type and quantity of materiel or supplies used for all personnel who come into physical contact with the selected items. Return completed tags to the personnel conducting the study to ensure that all tags have been returned and properly completed.

2. Assign a cost to all of the elements identified to the cost goal.

3. Annotate the resulting cost estimates to show the confidence level of the resulting estimate within a specific range.

C. Independent Appraisal. Use the independent appraisal technique when the cost determination is made after the cost goal is completed, and there is no similar product being produced. Normally, this is done by an engineer or an expert in the production process. Under this procedure, list all resources involved in fabricating the product or performing the service. Then, analyze each resource to establish a reasonable cost. The total cost of the applied resources represents a reasonable estimate of costs incurred in the cost goal.

D. Commercial Costs. Commercial costs are used for incidental activities carried out during a mission requirement. Under these circumstances, using the normal full cost for producing a product or providing a service would not be representative of the incurred cost. (For example, using commercial charges to estimate the costs involved in transporting a disabled aircraft to a repair facility incident to the performance of its normal mission would be more representative of the allocable cost incurred.)

E. DELPHI Technique. Use this technique only when more traditional cost estimation techniques cannot be applied to a cost objective, because it is the least precise estimating method.

1. The DELPHI technique uses a series of estimates made by a group of experts. These estimates are refined as later estimates are made. (For example, five construction experts are tasked with estimating the costs associated with a new construction technique. These experts are provided the initial parameters of the project, such as location, required specifications, geographical, environmental, time, political constraints, and other data at the time of project initiation. Each group member develops an initial estimate of component costs, then reconvenes with the other experts to discuss the individual analyses. After a group discussion, each expert is asked to refine their estimate based on what was learned at the meeting. The evaluation process is repeated by each participant to arrive at a revised estimate. The process is repeated as often as necessary, until the group achieves consensus as to the best estimate.)

2. This technique is probably more useful in determining the cost of a new product or service than determining the actual cost of an existing product or service.

F. Memorandum Records. An informal method for gathering cost data that is used when the value of the cost data is of little significance. It involves preparing a memorandum to document cost estimates for a specific product or service. Do not use this technique when significant decisions are to be based on the cost estimates derived or when other more accurate methods are available. It is useful for estimating future costs for low priority, low value projects or products when a traditional cost accounting system is too costly.

G. Analysis of Responsibility Center/Cost Center Obligations. This technique is helpful when good organizational costs are available through a specific responsibility center or cost center organizational structure. Costs associated with the center can be distributed to a product or service of the center to estimate at least part of the cost of that product or service.

H. Combining Cost Finding Techniques. Cost finding techniques can be combined to arrive at a more accurate estimate of the costs involved. The techniques provided can also be used to augment data generated by a conventional cost accounting system. Focus on the cost data requirement or objective, so as to utilize the best cost accumulation system or method to achieve the highest quality cost data at the lowest cost. A cost finding technique that is not described here may also be used (e.g., activity-based costing), as long as it conforms with the general requirement for reliability in relation to the value of the cost data.

#### 1510 ARMY FAMILY HOUSING (AFH) ACCOUNT.

151001. The costing of equipment, including trucks for moving U.S. Government owned furnishings, used in the operation and maintenance of family housing will be affected by use of equipment usage rates. (See AR 420-17, Real Property and Resource Management.) At

the end of each accounting period, reimburse the operating account and charge the applicable family housing accounts. Account for such charges as funded costs to AFH.

151002. Charge utility costs to the applicable family housing accounts at the end of each month. Determine the costs by meter readings, if available, or by engineering analysis based on sampling where it is not economically feasible to install and use meters.

151003. Cost centrally procured furnishing charges (initially outfitting AFH or replacement) as a funded cost by the procuring activity (simultaneously with the obligations). The receiving activity will account for subsequent issues of these family housing furnishings from installations as free issue.

151004. When the labor distribution system (used by the facilities engineer) employs shop or productive expense rates to distribute labor costs to family housing, develop local rates (including labor, leave, and employers' contributions only) for this purpose. Do not include other costs in these rates.

151005. Account for military personnel directly assigned to or performing services for family housing as an unfunded cost within the family housing account structure. Identify costs as close as possible to the correct item of expense and category of housing. Military labor is the only unfunded cost.

151006. Certain services are furnished in support of the family housing program for which it is not feasible to make a direct charge to AFH. Charge such indirect costs of installation support activities, (e.g., facilities engineer office and supply activities), to AFH as follows:

A. Do not predetermine a percentage or amount of funds to apply to AFH for installation support services or administrative costs identified as indirect overhead. Charge family housing for indirect support costs on an incremental basis by charging only for costs of the existing level of capability specifically required by the presence of family housing facilities. If family housing is serviced by a particular activity or cost center and that activity or cost center does not require additional personnel, do not charge indirect costs to family housing. When AFH is charged, make the charge only in multiples of one or more whole personnel spaces. It is not necessary that only one position at the specific activity or cost center be involved in the charge for a personnel space. Several people may divide this work effort. The installation commander will review and evaluate any personnel space charged to family housing, at least annually, to support the charge to AFH. Do not charge acceleration to recover supervision or support pertaining to these personnel increments.

B. Where a service operation, such as refuse collection and disposal or custodial service, is too complex to permit ready identification of proper family housing costs, charge AFH for a proportionate share of service received on a unit of service basis. For example, charge for the number of refuse pickups and locations, or for the square feet of floor area receiving custodial service.

C. Activities that have established shop or productive expense rates will apply the applicable rate to direct work or services in support of family housing.

D. Do not distribute cost to AFH from those installations, administrative, or other base operations support activities or cost centers that cannot be identified as benefiting the family housing program, (i.e., do not distribute costs for chaplain activities or laundry and dry cleaning services.)

E. Base charges for indirect support furnished to family housing at DWCF installations and activities on the DWCF accounting system and procedures. The DWCF accounting system and procedures follow the principle of not applying the activity general and administrative overhead rate to family housing indirect support costs. However, charge support services furnished to family housing by functions included in general and administrative cost centers of DWCF activities on an incremental basis.

F. The policy in paragraph 151006.A. above is applicable when the situation is reversed. That is, when minor activities not a part of the family housing program are physically located within an integral family housing complex or office supported by AFH funds.

151007. Each installation responsible for the operation and maintenance of general officers' quarters will maintain separate subordinate cost accounting records at the detail activity and performance level for each set of quarters (see DFAS-IN Manual 37-100-FY). Maintain these cost records for special reporting purposes to provide an analysis of the directly identifiable costs for the operation and maintenance of each set of general officers' quarters (see AR 210-50 for reporting instructions). These requirements apply only to family quarters that meet the criteria set forth in AR 210-50.

151008. At installations having 30 or fewer family housing units under their control, it is not necessary to maintain detail cost accounts, (as prescribed in DFAS-IN Manual 37-100-FY), except for those levels required for reporting to DFAS-IN and requirements specified in AR 210-50. Where cost accounting operations for several installations or housing locations are consolidated for a total of 31 or more units, the procedures authorized by the preceding sentence are optional at the installation level. The applicability depends upon whether administrative savings would be realized or other circumstances exist.

151009. Reimbursements earned and collections.

A. Account for reimbursements authorized and earned in the operation and maintenance of family housing facilities as funded reimbursements. Credit all reimbursements to AFH AMSCOs 191000.00 or 192000.00 (see DFAS-IN Manual 37-100-FY), irrespective of the project in which the related cost was incurred. Reimbursement billings for services furnished will be in the same amounts as costs incurred in the AFH, except for rentals collected for occupancy of Capehart Housing. For example, if utilities were paid initially by OMA funds and charged to the AFH at a fixed rate based on an engineering analysis, then use that same rate in

obtaining authorized reimbursement to the AFH from the actual users of such utilities. See AR 210-12 (Establishment of Rental Rates for Quarters Furnished Federal Employees) for basic principles in establishing and administering rates for Federal employees. See DFAS-IN Manual 37-100-FY for the proper source codes to be used to identify cash collections for services (excluding rentals) furnished civilian occupants of family housing units.

B. Identify collections with the installation (fiscal station number) that received the related obligation authority. Deposit rental receipts as prescribed in DFAS-IN Manual 37-100-FY, unless the AFH account is to be reimbursed for certain rental receipts when specifically authorized by DoD in special agreements. Deposit collections from individuals for damages to the operations and maintenance account for AFH. Deposit collections from individuals for damages, replacement or rental of U.S. Government owned furniture as specified in DFAS-IN Manual 37-100-FY. Reimbursements for services, in addition to rentals and related utilities furnished by AFH is limited to the following:

1. A charge levied against a non-DoD Federal or other agency, which is sponsoring occupants of family dwelling units where the operation and maintenance support applicable to such units, is a responsibility of the host Army activity or installation. Operation and maintenance support to or from another DoD activity will be on a common support basis.

2. Do not account for utilities and related services, (except telephone services), authorized to be furnished to military and civilian personnel without charge, as reimbursable items.

#### **1511 PRODUCTIVITY PROGRAM**

151101. AR 5-4 (Department of Army Productivity Improvement Program) provides guidance on Army productivity programs and will be applied to all Army appropriations. Report financial data to support this program as follows:

A. Personnel Compensation Costs. Include salaries and related benefits.

B. Capital Costs. Include amortization or depreciation of hardware, software, buildings, machinery, vehicles, etc. (refer to Chapter 22 for guidance on depreciation and amortization). Include costs of capital items provided by contract. When capital costs for a program function are a part of a larger system, estimate the portion of the costs attributable to the productivity program function being reported. If capital costs are ten percent or less of total inputs, include in the other costs category.

C. All Other Costs. Include costs not included as personnel compensation costs or capital costs. Do not include developmental or training costs for automated data processing (ADP) systems not yet implemented, which will be recorded as capital expenses when the system is operational.

151102. Dollar values are to be reported on productivity reports as follows:

A. Follow the guidance in section 1509 to determine the dollar values to be included in productivity reports. Additional guidance to meet the reporting requirements follows.

1. Divide capital costs into two groups: real property and personal property.

2. Develop a schedule of all real property or real property improvements (other than land) that is 20 years old or less, together with their acquisition cost. Divide the acquisition costs of the items on the schedule by 20 years to obtain the annual depreciation expense.

3. Include an amount for indirect costs for all other costs.

4. For the productivity reports, limit indirect costs to those costs incurred by organizations that directly support the performing unit, so indirect costs will be similar to overhead.

B. With the exception of costs associated with EORs 31\*\* (equipment) and 32\*\* (land and structures), which tend to have value beyond the current accounting period, the timing of the obligation and use of the item are so similar that recorded obligations may generally be considered daily operating expenses. See DFAS-IN Manual 37-100-FY.

#### **1512 INFORMATION TECHNOLOGY FACILITIES (ITFs)**

151201. General. The purpose of this section is to prescribe cost accounting requirements for ITFs. ITFs include data processing facilities, data processing installations, central design activities, computer centers, data centers, etc.

151202. Requirements. Accounting systems will provide sufficient accounting support to ITFs to identify obligations applicable to their operations. ITFs will identify costs applicable to services provided to users if:

A. services are provided to more than one organizational or accounting entity,

B. it operates one or more general management computers, and

C. it has annual operations and maintenance obligations greater than \$3 million. An ITF will identify costs applicable to services provided to users if it has an annual reimbursable program of more than \$500 thousand. Exclude services provided under emergency conditions or reciprocal backup agreements from the service costing requirement. DWCF activities will follow the guidance contained in this chapter for the ITF function.

151203. Definitions.

A. Cost Center. A logical or physical grouping of one or more similar services for identifying obligations or developing the cost identification for the services. Services are grouped into cost centers to standardize between services that use similar resources with different capabilities; apply surcharges and discounts to services; identify costs for different classes of the same service; or identify obligations. One or more cost centers will make up an ITF. A cost center is also referred to as a service center.

B. Costs.

1. Direct Costs. An item of cost that is easily and readily identified to a specific unit of work within the ITF cost centers, such as civilian and military personnel costs, supplies, materials, contract services, etc.

2. Indirect Costs. An item of cost that is incurred for more than one specific unit of work within the ITF, which cannot be easily and readily identified to a single item and must be allocated. Numerous allocation methods can be used.

3. Overhead Costs. An item of cost, such as general and administrative expenses, that supports the total operation of the ITF and not just selected cost centers. Some other examples of overhead costs are the front office of the ITF, administrative staffs, utilities, or general maintenance and repair expenses. Different allocation methods can be used.

C. General Management Computer. Is a digital computer used for any purpose other than as a part of a process control system, space system, mobile system, or equipment that is an integral part of a weapon or weapons system. This excludes equipment involved with intelligence activities and cryptologic national security activities.

D. ITF. An organizationally defined set of personnel, hardware, software, and physical facilities, operated within or for DoD, whose primary function is the operation of information technology. An ITF includes:

1. The personnel who operate computers or telecommunication systems; develop or maintain software; provide user liaison and training; schedule computer jobs; prepare and control input data; control, reproduce, and distribute output data; maintain tape and disk libraries; provide security; and provide direct administrative support to personnel engaged in these activities.

2. The owned or leased computer and telecommunications hardware, including central processing units, associated peripheral equipment (e.g., disk drives, tape drives, printers, and consoles, data entry equipment, telecommunications equipment including control units, terminals, modems, and dedicated telephone and satellite links) provided by the facility to enable data transfer and access to users. Excludes hardware acquired and maintained by users of the facility.

3. The software, including operating system software, utilities, sorts, language processors, access methods, data base processors, and similar multi-user software, required by the facility for support of the facility or general use by users of the facility. Excludes all software acquired or maintained by users of the facility.

4. The physical facilities, including computer rooms, tape and disk libraries, stockrooms and warehouse space, office space, and physical fixtures.

E. Service. Any work performed by the ITF for a user or group of users.

F. Unit of Service/Work. The end product or unit used to measure the amount of service or work received by users. Some examples are: central processing unit (CPU) hours for a CPU service, lines printed for a printing service, lines of code written for software development, or checks processed for a payroll service. The units of service selected should be an accurate unit of the dominant type of work performed.

G. User. An individual, organizational or accounting entity that receives ITF services. A user may be internal or external to the Army component.

151204. Identification of Obligation Data. Provide accounting support to ITFs so they can identify obligation data and report it, when required.

151205. Identification and Allocation of Costs.

A. The identification and allocation of costs enables the ITF to identify the costs incurred by the ITF for providing its services, and allocation to the appropriate service unit. If an allocation process is used, it must properly relate costs (direct, indirect, and overhead) to the appropriate service unit, and be properly documented. When a charge is made for ITF services, use the cost identification and allocation process to identify the users and compute the charges. Maintain a description (including a schematic) of the allocation process that shows the relationships of the various cost center direct costs, indirect cost pools, and overhead costs for review by appropriate authority and for user understanding of the allocation process.

B. Distribute all costs associated with the operation of an ITF to the appropriate service units. The charges must be equitable to resources consumed and priority requested. Identify dedicated services to specific users. For multiple user services, estimates may be used where necessary, provided these estimates are equitably identified for all service units. Within the ITF, provide further breakdowns to specific cost centers. Use a documented cost element structure to determine costs within these centers.

C. Periodically review the identification and allocation process to ensure that no service has been inadvertently omitted or unnecessarily included.

D. Once cost centers are established, specific units of service or work will be

established to produce a rate for each type of service provided.

E. Identify all direct costs associated with an ITF to the applicable cost centers.

F. Establish indirect cost pools to identify the indirect costs associated with groups of service units. Allocate these costs periodically, based on an acceptable allocation method, (such as total direct costs or total direct labor hours.) Document the allocation method applied.

G. Establish an overhead cost pool for an ITF. Identify applicable costs to the overhead cost pool and periodically allocate, based on an acceptable allocation method (e.g., total direct costs or total direct labor hours.) Document the allocation method applied.

H. Evaluate indirect and overhead costs periodically to verify cost type (that is, indirect or overhead), and adjust allocations to the applicable service units, as necessary.

I. Maintain a record to identify the users of an ITF and the services provided to each user. The total output of an ITF must be reconcilable with the work accomplished or produced by the ITF. Derive statements of charges or identification of ITF services for users from records maintained by the ITF, preferably by each cost center. These records are required for verification of cost allocations, and for planning and budgeting purposes.

J. Establish and document management control procedures for implementing this chapter.

151206. Rate Computation. When developing rates:

A. Each service should have only one unit or service or work measurement.

B. Services and their units of service should be easily understood by the ITF users.

C. Services should represent a significant portion of the ITF's work, and the units of service should be a good measure of the amount of work performed.

D. Services are not to be limited to equipment. Other services, especially personnel based services, are often costly and should be identified.

E. When possible, services that are transaction or output based should be selected, so the users can easily understand them.

F. On a periodic basis, review services for any changes. Policies and procedures need to be in place to facilitate this process.

G. Rate development should follow a sequential procedure. The five basic steps to be taken are:

1. Identify all costs associated with the ITF, including direct, indirect, and overhead costs.
2. Identify the cost centers and all costs associated with each center.
3. Forecast the service usage or predict the number of units of service (CPU seconds or analyst hours) to be provided within a cost center.
4. Estimate the total cost per period for each cost center using the direct, indirect, and overhead costs from step 1 (paragraph 151206.G.1 above).
5. Establish the rate for each unit of service by dividing the forecast cost (step 4 (paragraph 151206.G.4 above)) of each cost center by the predicted number of units of service required (step 3 (paragraph 151206.G.3 above)). These rates incorporate all cost center costs into one factor that may be used for current or future jobs. Verify such rates periodically.

151207. Potential Costs Associated with an ITF.

A. Personnel. Includes both civilian and military persons who manage and perform information technology (IT) functions. IT functions include development and upkeep of computer software, operation and management of in house data processing centers and departments, data preparation, electronic output reproduction and distribution, equipment maintenance, and contract management. Personnel costs also include individuals performing IT related custodial services, security, and building maintenance. Also included, are other personnel related costs for training, travel, and recruiting.

B. Equipment. Non-recurring expenditures for acquisition and recurring costs for rental and leasing of computers, associated on-line and off-line automatic data processing equipment (ADPE), and special purpose IT furniture. If the dollar value of equipment meets the current investment threshold and has a useful life of 2 years or more, depreciation is applicable.

C. Computer Software. Non-recurring expenditures for acquisition, development, and conversion and recurring expenses for rental and leasing of all types of operating software, multi-purpose and specific application. If the dollar value of the software meets the current investment threshold and has a useful life of two or more years, then depreciation may be applicable.

D. Space Occupancy. Funded and unfunded costs for rental and lease of buildings and general office furniture; building maintenance; regular telephone service and utilities; and custodial services and security.

E. Supplies. Expenditures for non capital office supplies, general and special purpose data processing materiel. Special purpose supplies are those prepared for one or a few applications. IT data storage media may be considered either supplies or items of equipment.

F. Contracted Services. Expenditures and contracting expenses for:

1. Technical and consulting services for agency operated computer facilities and equipment, (including equipment maintenance, security and custodial services for computer facilities, and advice on the acquisition, selection, and use of computer facilities or software.)

2. Computer system services and off-line equipment services, such as for key data entry and report reproduction.

3. Analysis, design, programming, documentation, and testing for development, modification, conversion and upkeep of computer software.

4. Data communications network services, associated telecommunications line charges, channel lease and rental, equipment rental and maintenance, and telecommunications system analysis and design.

G. Services From Other Units or Agencies. The costs of other U.S. Government agencies or organizational elements for those services cited under "Contracted Services," above.

H. Intra-agency Services and Overhead. The costs of normal agency support services and overhead, either billed or allocated, and the costs of central ADP management, policy, and procurement services.

#### **1513 APPROPRIATED FUND SUPPORT FOR DOD MORALE, WELFARE AND RECREATION UTILIZATION**

See HQDA Letter 215-98-1, subject: Morale, Welfare and Recreation Utilization, Support and Accountability (MWR USA) Practice, June 10, 1998. Use EOR 2500 to budget and account for appropriated funds used to support the DoD MWR USA Practice. Use a Miscellaneous Obligation Document to support the obligation.

<b>EXAMPLE OF COMPUTATION ESTIMATED COSTS OF ANNUAL LEAVE</b>	
Total estimated cost for annual leave	\$930,000
Plus estimated increase in value of accrued annual leave due to pay raise.	\$30,000
Total amount to be accrued.	\$960,000
Divided by estimated regular pay for regular, overtime and holiday hours worked.	\$10,000,000
Equals annual leave accrual rate, if base is dollars.	.096
OR	
Total amount to be accrued (above)	\$960,000.
Divided by total number of estimated civilian working hours, including regular, overtime holiday hours.	
Equals standard rate for accruing annual leave if base is working hours.	

Table 15-1

<b>COMPUTING STANDARD RATE FOR ACCRUING CSRDF &amp; OTHER RETIREMENT PLANS</b>				
Total estimated annual covered salaries (CSRDF)	X	Appropriate rate	=	Annual estimated CSRDF cost.
Annual estimated CSRDF cost.	/	Total number of all civilian employees	=	Average annual cost per employee.
Average annual cost per employee	/	Average working hours.	=	Standard rate for accruing retirement per employee hour.
Annual estimated CSRDF cost (above).	/	Estimated pay for regular overtime and holiday hours worked.	=	CSRDF accrual rate if base is dollars.

Table 15-2

<b>EXAMPLE OF COMPUTATION (ACCRUAL FOR FICA TAXES)</b>				
Estimated covered salaries not to exceed maximum per covered employee.	X	Applicable rate	=	Estimated annual FICA cost.
Estimated annual FICA cost	/	Total number of all civilian employees.		Average annual cost per employee.
Average annual cost per employee.	/	Average working hours.	=	Cost per average hour.
<b>OR</b>				
Estimated annual FICA cost.	/	Estimated pay for regular, overtime, and holiday hours worked.	=	FICA accrual rate if base is dollars.

Table 15-3

<b>EXAMPLE OF COMPUTATION (FEGLI STANDARD RATE)</b>				
Total estimated FEGLI covered payroll cost	+	Number of FEGLI covered civilian employees X \$2,000.	=	Total estimated regular insurance coverage.
Total estimated regular insurance coverage.	X	Regular biweekly insurance coverage cost.	=	Biweekly cost to employees.
Biweekly cost to employees.	X	50%	=	Government's biweekly estimated cost, regular insurance
Biweekly estimated cost, regular insurance	X	26 pay periods	=	Annual estimated FEGLI cost.
Annual estimated FEGLI cost	/	Estimated annual employee working hours	=	Estimated FEGLI rate per employee working hours.
<b>OR</b>				
Annual estimated FEGLI Cost	/	Estimated annual payroll for regular time, overtime and premium pay.	=	Estimated FEGLI rate per labor dollar.

Table 15-4

EXAMPLE OF COMPUTATION (FEHBP STANDARD RATE)				
Annual estimated FEHBP cost	/	Estimated annual work hours	=	Estimated accrual rate per working hour
OR				
Annual Estimated FEHBP cost.	/	Estimated regular pay for regular time, overtime, and premium for holiday hours worked.	=	FEHBP accrual rate per dollar

Table 15-5

EXAMPLE OF CONTRIBUTION (MEDICARE STANDARD RATE)				
Total estimated annual covered salaries	X	Medicare rate	=	Annual estimated Medicare cost
Annual estimated Medicare cost	/	Total number of civilian employees	=	Average annual cost per employee
Average annual cost per employee	/	Average working hours per employee	=	Standard rate for accruing Medicare per employee working hour
OR				
Annual estimated Medicare cost	/	Estimated regular pay for regular time, overtime, and premium pay for holiday hours worked	=	Medicare accrual rate if base is dollars

Table 15-6

REQUIRED PROJECT ACCOUNTS		
	If the project is for:	then:
1.	Alteration and minor construction work funded by O&M (see Notes 1 - 4)	set up individual accounts as subdivisions of the Real Property Maintenance activities IAW DFAS-IN Manual 37-100-FY.
2.	Alteration and minor construction work funded by the military construction appropriations (see Notes 1 - 4)	set up individual accounts as subdivisions of minor construction codes IAW DFAS-IN Manual 37-100-FY.
3.	Alteration and minor construction work at RDT&E funded installations (see Notes 1 - 4)	set up individual accounts as subdivision of Real Property Maintenance activities IAW DFAS-IN Manual 37-100-FY.
4.	Maintenance and repair work funded by O&M (see Notes 1 - 4)	set up individual accounts as subdivision of Real Property Maintenance activities IAW DFAS-IN Manual 37-100-FY.
5.	Maintenance and repair work at RDTE funded installations (see Notes 1 - 4)	set up individual accounts as subdivisions of Real Property Maintenance activities IAW DFAS-IN Manual 37-100-FY.
6.	Maintenance of Real Property Facilities work funded under O&M, Army family housing program, 192000.00 (see Notes 1 - 4)	set up individual accounts under program 192000.00 IAW DFAS-IN Manual 37-100-FY.
7.	Improvement work funded under the Military Construction Family Housing program 1830 (Notes 1-4)	set up individual accounts under program 600000.00 IAW DFAS-IN Manual 37-100-FY.
8.	A special facilities engineering maintenance or repair project (including family housing) requiring approval above the installation level	Set up an individual project cost account.
9.	Work where the project accounts are maintained by the facilities engineer	the OPLOC/FAO/ will maintain control accounts for DFAS-IN Manual 37-100-FY accounts shown in above rules.

**NOTES FOR TABLE 15-7, REQUIRED PROJECT ACCOUNTS:**

1. For specific maintenance or repair work where costs are chargeable to more than one prescribed activity, charge these costs initially to a project clearing account for later distribution to the proper activity account.
2. For work on which activity extends beyond the end of the fiscal year, record the cumulative costs as of the end of the fiscal year in the account set up for the project in the next fiscal year. Record costs in a manner that will both ensure the continuity of the project's cumulative costs, and facilitate reconciliation on a fiscal year basis.
3. Record costs, which are not to be considered in determining approval authority or compliance with statutory limits, as part of the installation's real property records whether paid for from the installation's funds or other funds, see AR 415-35.
4. AR 415-35 sets forth the costs that will be applied to a project in determining approval authority and compliance with statutory limitations.

Table 15-7

<b>PROCEDURES FOR ACCOUNTING FOR BASIC COST ELEMENTS</b>			
	<b>If the basic cost element is:</b>	<b>and it consists of:</b>	<b>then:</b>
1.	Labor	civilian personnel engaged in alteration, minor construction, maintenance, and repair working on more than one area	charge labor costs of these personnel to the benefiting projects on the basis of hours actually spent. Include in the hourly rates:
			a. The costs of any pay differentials and allowances, if any.
			b. Annual, sick, and other leave.
			c. Costs of employer contributions for taxes, employee insurance, health benefits, and retirement programs.
2.	Supplies	consumable and non-consumable supplies	charge issues of these supplies to the benefiting project accounts as shown in DFAS-IN Manual 37-100-FY.
3.	Contractual services and other costs		charge these costs to the benefiting project accounts as shown in DFAS-IN Manual 37-100-FY.
4.	Equipment		charge these costs to the benefiting projects on the basis of the days that the equipment was used on the project.
			Charge the following to projects as funded costs:
			a. Facilities engineering equipment maintenance and operation costs.
			b. OMA funded and operation costs of all Government owned equipment.
	a. Minor construction Government owned equipment projects.		Charge equipment depreciation costs in the project as unfunded costs. Exception: Consider depreciation cost of plant equipment owned by Civil Works Revolving Fund, USACE, and DWCF-DMA as funded cost.
		Rental equipment	charge these costs to the benefiting projects as funded costs on the basis of the days that the equipment was used on the project (see the corresponding credit in accounts as identified in DFAS-IN Manual 37-100-FY). In finding the rental costs, apply to separate direct rates as prescribed in AR 420-17.
	b. Maintenance and repair equipment projects		charge these costs to maintenance and repair projects as prescribed for minor construction projects in (a) above.

Table 15-8